Illustrating Birds of Grant Kohrs Ranch NHS Cathy Wilson & Maggie Hunter

Grades: 9-12

Subject(s): Science, Art, and Language

Duration:

(All) One day for interdisciplinary class introduction

Science: one day for field study work, two days in the class room

Language: one day for language class

Art: One day field study, two days in the classroom

Description: Educate students in field identification, field illustration, and sharing gathered information with younger children.

Goals: To combine science, art and language to illustrate and describe the diverse bird population of Grant Kohrs.

* Teacher Instruction:

- 1. Prepare students by previewing all types of birds they might find while birding the Grant Kohrs Ranch.
- 2. Contact Grant Kohrs Ranch to set up a guided birding tour.
- 3. Teachers instruct your students on proper park etiquette
- 4. Contact your area birding expert. (If birding at Grant Kohrs, Gary Swant would be a valuable contact)
 - 5. Check on transportation availability
 - 6. Check on the availability of display site for the finished illustrations

Objectives:

- 1. Have students learn proper birding field techniques (see attached)
- 2. Have students learn common birds found at the Grant Kohrs Ranch
- 3. Have students understand the different habitat ranges found at the Grant Kohrs Ranch
- 4. Have students understand the different aspects of scientific illustration

Materials: (field)

- 1. Binoculars
- 2. Birding field guide
- 3. Field data collection sheet
- 4. Clip boards and pencil
- 5. Weather related clothing
- 6. Digital cameras for art students

Materials: (classroom)

- 1. Pencils, colored pencils, and erasers
- 2. Computer with Internet connection
- 2. Sketch pads
- 3. Illustration board
- 4. View illustrations by Roger Tory Peterson, John J Audubon, and David Allen Sibely

http://www.sibleyguides.com/

Http://www.audubon.org/nas/jja.html

Http://www.galleryone.com/peterson_prints.html

Http://www.infoplease.com/ce6/people/A0838607.html

Procedure:

The following lesson plan combines the studies of Science, Art and Language in the development of a scientific illustration process.

Art, Science, and Language classes

1. Combine classes for explanation of interdisciplinary project.

Field Work Activities

1. Research various Montana birding websites

Http://www.gobirdmontana.com

Http://www.groups.yahoo.com/group/MOB-Montana

Http://www.mtaudubon.org

Http://www.nhp.nris.mt.gov/animal/searchbird_latilong.asp

Http://www.nhp.nris.mt.gov/mbd/

Http://www.nhp.nris.mt.gov/NHIP/

Http://www.audubon.org/bird/cbc/index.html

Http://www.thayerbirding.com

Http://www.birds.cornell.edu

Http://www.thayerbirding.com/favorites.htm

- 2. Discuss Montana birds found on various website
- 3. Review proper field birding techniques (see attached)
- 4. Field trip to Grant Kohrs Ranch
- 5. Document and sketch found birds

Interdisciplinary Classroom

- 1. Combine information gathered in the field
- 2. Discuss each group responsibility for birding project
- 3. Break into groups

Art

1. Draw and illustrate each found bird, focusing on detail

Science

1. Review and label each birds anatomy

Language

1. Research and write a brief description on each bird found

Art

1. Organize and display illustrations and information found on each resident bird

Assessment:

Students should be assessed for individual and team achievement in the following areas:

- 1. Student's ability to list found birds and characteristics and the steps in research design.
- 2. Assess teamwork and participation through individual and group discussion.
- 3. Proper easy readability and grammatical correctness.
- 4. Assess final illustrations in the use of media, effort and final composition.

Montana Content Standards:

Science Content Standards: 1,3,&5 Art Content Standards: 1,2,3,4, &6 Language Content Standards: 1,2,4,5, & 6

Field Birding Techniques

Here is a short list of points to concentrate on while birding:

- 1. Come prepared with proper tools.
- 2. Be QUIET with your voice and your body.
- 3. Listen and look.
- 4. Wear a hate, cover your eyes.
- 5. Remember to look for certain birds in certain habitats.
- 6. Look for overall size compared to other birds present.
- 7. Note the birds shape and silhouette.
- 8. Break down plumage patterns by area, such as black head, brown back, white bill, red bill, leg color, etc.
- 9. Bird behavior and action at rest.
- 10. Manner of flight
- 11. Most birds tell us what they are by the sounds they make
- 12. Take time to observe and collect data, don't be in a hurry
- 13. Last but not least, do you have permission to bird in the area?

Data Collection Sheet

Habitat	Time of Day	Bird	Other Observations